

PROPOSED REGULATIONS

For information concerning Proposed Regulations, see Information Page.

Symbol Key

Roman type indicates existing text of regulations. *Italic type* indicates proposed new text.
Language which has been stricken indicates proposed text for deletion.

TITLE 9. ENVIRONMENT

STATE WATER CONTROL BOARD

Title of Regulation: 9 VAC 25-780. Local and Regional Water Supply Planning (adding 9 VAC 25-780-10 through 9 VAC 25-780-190).

Statutory Authority: §§ 62.1-44.15 and 62.1-44.38:1 of the Code of Virginia.

Public Hearing Dates:

May 4, 2005 - 2 p.m. (Abingdon)
May 5, 2005 - 2 p.m. (Roanoke)
May 9, 2005 - 2 p.m. (Harrisonburg)
May 10, 2005 - 7 p.m. (South Hill)
May 11, 2005 - 2 p.m. (Lynchburg)
May 12, 2005 - 4 p.m. (Glen Allen)
May 16, 2005 - 7 p.m. (Woodbridge)
May 17, 2005 - 7 p.m. (Virginia Beach)

Public comments may be submitted until June 3, 2005.

(See Calendar of Events section
for additional information)

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Basis: This regulation was developed to implement the mandate of § 62.1-44.38:1 of the Code of Virginia which requires that: "The Board, with the advice and guidance from the Commissioner of Health, local governments, public service authorities, and other interested parties, shall establish a comprehensive water supply planning process for the development of local, regional and state water supply plans consistent with the provisions of this chapter." This is a mandatory rather than discretionary action by the Board.

Section 62.1-44.15 of the Code of Virginia provides the State Water Control Board with legal authority to promulgate the proposed regulation.

Purpose: The proposed regulation protects the health, safety and welfare of citizens by requiring local and regional water supply planning. The goal of the new regulation is to establish a basic set of criteria that each local or regional water supply plan must contain so that they may plan for and provide adequate water to their citizens in a manner that balances the need for environmental protection and future growth.

Substance: The proposed regulation establishes all the necessary provisions for local and regional water supply plan application, plan contents, plan submittal and plan review.

Issues: Water supply is a critical factor for the economic vitality and public health of the Commonwealth, as well as its political subdivisions. The demand for water supply is

constantly increasing and the amount available to meet these needs is finite. In fact, unmet needs for local and statewide water supply planning have been identified throughout the past quarter century. The primary advantage to the public of this proposed regulation is the increased probability of a safe and adequate water supply for the citizens of the Commonwealth in the future as well as the continued enjoyment of all existing off-stream and in-stream beneficial uses. Advantages to local and regional planners include:

1. Improved information on resource issues that impact long-term plans and projects;
2. Promotes focus on most viable water supply alternative;
3. Improved coordination and preparation for permitting and regulatory processes; and
4. Economic development tool (i.e., documented plans for meeting water supply needs).

One disadvantage that may be perceived by the public may be the lack of a direct relationship between the planning required by the proposed regulatory action and the permitting of a particular water supply project.

Some advantages to the Commonwealth of this proposed regulation include:

1. Greater understanding of water resources and water demands;
2. Increased information for use in evaluating water supply projects;
3. Increased public involvement in resource management decisions;
4. Earlier opportunity to identify and address conflicts among users; and
5. Improved responsiveness and preparation for drought.

There are no apparent disadvantages of this regulatory action to the Commonwealth.

Pertinent matters of interest to the regulated community, government officials, and the public are the potential costs to meet the requirements of this regulation.

Department of Planning and Budget's Economic Impact Analysis: The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with § 2.2-4007 H of the Administrative Process Act and Executive Order Number 21 (02). Section 2.2-4007 H requires that such economic impact analyses include, but need not be limited to, the projected number of businesses or other entities to whom the regulation would apply, the identity of any localities and types of businesses or other entities particularly affected, the projected number of persons and employment positions to be affected, the projected costs to affected businesses or entities to implement or comply with

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the regulation, and the impact on the use and value of private property. The analysis presented below represents DPB's best estimate of these economic impacts.

Summary of the proposed regulation. Chapter 227 of the 2003 Acts of Assembly requires the State Water Control Board (board), with advice and guidance from the Commissioner of Health, local governments, public service authorities, and other interested parties, to establish a comprehensive water supply planning process for the development of local, regional, and state water supply plans that (i) ensure adequate and safe drinking water for all citizens of the Commonwealth, (ii) encourage, promote, and protect all other beneficial uses of the Commonwealth's water resources, and (iii) encourage, promote, and develop incentives for alternative water sources, including but not limited to desalinization.

The proposed regulation establishes a process for the development of local and regional water supply plans and criteria to be used by local governments in the development of these plans.

Estimated economic impact. Description of regulation: The proposed regulation establishes a process for the development of local and regional water supply plans. Local governments are required, in consultation and coordination with community water systems, to develop water supply planning programs that ensure availability of adequate and safe drinking water, encourage and protect all in-stream and off-stream beneficial uses¹, encourage and promote alternative water sources, and promote conservation. Localities with population in excess of 35,000 are required to submit a local water supply planning program to the Department of Environmental Quality (DEQ) within three years of the effective date of this regulation.² Localities with population in excess of 15,000 are required to submit a plan within four years and localities with population less than and or equal to 15,000 are required to submit a plan within five years of the effective date of this regulation. Localities can also elect to participate in regional water supply plans. If they choose to do so, they are required to provide DEQ with notice of their intent to participate in a regional plan and submit a list of other localities participating in the plan within three years of the effective date of this regulation and are required to submit the regional plan within six years of the effective date of this regulation.

The proposed regulation also establishes criteria to be used by local governments in the development of their local and/or regional water supply planning programs. Water supply planning programs are to include (i) a description of existing water sources, existing water uses, and existing water resource conditions, (ii) an assessment of projected water demand, (iii) a description of water management actions including drought response, contingency plans, and other water demand management information, (iv) a statement of need, (v) an analysis that identifies alternatives to address

projected deficits in water supply, (vi) map(s) identifying important elements of the program such as existing water sources, proposed new sources, and significant existing water uses, (vii) a copy of relevant local program documents, (viii) a resolution approving the water supply plan for each locality participating in the plan, and (ix) a record of the public hearing, a copy of all written comments, and a copy of all responses to written comments.

The proposed regulation establishes criteria to be used by localities in the development of their water supply plans. It provides specific guidance regarding the content of these plans. For example, the proposed regulation details information to be reported in a locality's water supply plan regarding existing water sources, existing water uses, and existing resource information. It also specifies the methodology to be used when projecting water demand, the various levels of aggregation at which demand projections are to be made, and the time horizon over which projections are to be made. The proposed regulation requires water supply plans to address conservation and drought response as part of the plan's water management actions. Contingency plans are required to be developed in accordance with the proposed regulation. Finally, all local and regional water supply plans are required to include a statement of need based on the adequacy of existing water sources to meet current and projected water demand over the planning horizon. In the event that existing sources are determined to be inadequate to meet demand over the planning period, water supply plans are required to include an analysis conducted in accordance with the requirements of this regulation that identifies alternative ways of meeting the shortfall in water supply.

The proposed regulation also establishes the state's role in the planning process. It requires that the state assist localities technically and financially in the development of their water supply plans, provide local governments with guidance on compliance options, facilitate the provision of existing resource, existing use, and water management information, identify acceptable methods for projection of future water demand, provide information relating to known conflicts in the development of alternatives to meet shortfalls in water supply, convene a meeting of the Technical Evaluation Committee at the request of the locality, and provide notice of local public hearing(s) on local programs.

All local and regional water supply plans are to be reviewed by the board in order to ensure compliance with the requirements of the regulation and consistency with the State Water Resources Plan. The Department of Health, the Department of Conservation and Recreation, the Marine Resources Commission, the Department of Historic Resources, the Department of Game and Inland Fisheries, and all other interested parties are to be provided with an opportunity to comment on the board's tentative and final decisions relating to local and regional program compliance.

Localities are required to review all water supply planning programs within five years of the program's compliance determination by the board. In the event of a change in circumstances or new information becoming available that results in water demand not being met by the alternatives listed in the plan, localities required to submit a revised plan.

¹ In-stream beneficial uses include the protection of fish and wildlife habitat, maintenance of waste assimilation, recreational uses, navigational uses, and cultural and aesthetic values. Off-stream uses include domestic, agricultural, electric power generation, and commercial and industrial uses.

² Population figures are to be based on the most recent U.S. census.

In the event of no significant changes, localities are required to notify DEQ that the existing plan continues to remain in effect. The five-year review notwithstanding, localities are required to review, revise, and resubmit their water supply planning program every 10 years.

Estimated economic impact: The proposed regulation is likely to impose economic costs. Localities will be required to develop a local water supply plan or participate in a regional water supply plan in accordance with this regulation. The cost of developing a local or regional water supply plan varies depending on the size of the locality, the complexity of delivery systems and current sources of supply, the degree of local need for additional supply, and the type of strategies identified to address shortfalls in water supply. DEQ estimates that it is likely to cost localities between \$13,000 and \$79,00 if the plan is developed using in-house resources and between \$19,000 and \$115,000 if it is developed using a combination of in-house resources and external consultants. Based on the number and size of the localities required to submit local water supply plans, the total cost of developing these plans is estimated to be approximately \$4.5 million if only in-house resources are used and approximately \$6.5 million if a combination of in-house resources and external consultants are used. Localities are also likely to incur costs in reviewing and revising plans every five or 10 years. However, DEQ believes that these costs are likely to be much smaller than the costs associated with initially developing the plan. The cost to localities participating in regional water supply plans is likely to be lower. However, an estimate of the cost savings to localities participating in regional plans is not available at this time.

DEQ anticipates awarding between seven and 17 water supply grants ranging from \$20,000 to \$50,000 to localities over the next two years to defray some of the costs associated with preparing these plans. The agency anticipates providing \$350,000 in such grants in FY 2006 and \$500,000 in such grants each year after that to defray some of the cost to localities of developing, reviewing, and revising local and regional water supply plans.

In addition to the cost to localities, DEQ is also likely to incur costs in running the program. The agency estimates that it will incur administrative costs of \$850,000 per year, including the cost associated with creating 13 full-time positions.³ In addition, the agency intends to conduct ground water characterization studies. According to DEQ, comprehensive ground water studies have not been conducted since the late-1970s and early-1980s. Such studies are necessary in order to have accurate existing water source information when developing the local and regional water supply plans. DEQ estimates that it will cost the agency \$350,000 per year over the next 10-15 years to conduct these studies.

The proposed regulation is also likely to produce economic benefits for the state. These benefits include the provision of adequate and safe drinking water, encouragement and

protection of beneficial in-stream and off-stream uses, encouragement and promotion of alternative water sources, and promotion of conservation activities. The drought of 2002 is a case in point when inadequate planning resulted in shortfalls in water supply. According to DEQ, several localities were within weeks or months of running out of drinking water during the summer of 2002. In August 2002, the city of Charlottesville had less than 90 days of drinking water supplies and even considered postponing the re-opening of institutions of higher education in order to ease the situation. Localities had not envisaged such an event and, hence, had no contingency plans in place to ensure a continuing supply of drinking water under drought conditions. The proposed regulation is intended to prevent such a situation from occurring again. The proposed regulation is also intended to identify potential conflicts between localities and between in-stream and off-stream when securing adequate drinking water supplies uses before they arise. By rationalizing state water resource use such that in-stream and off-stream benefits are balanced and ensuring consistency in the use of water resources on a statewide basis, the proposed regulation is likely to produce additional economic benefits by encouraging more efficient use of Virginia's water resources.

It is worth noting that DEQ does not currently intend to directly link the water supply planning process to the permitting of water supply projects. Thus, localities are not required by regulation to ensure that water supply projects undertaken by them are consistent with their local or regional water supply plan. Water supply projects are currently permitted under the Virginia Water Protection Permit (VWPP) regulations.⁴ While DEQ intends to evaluate VWPP applications in the context of local and regional water supply plans, the proposed regulation specifically states that a review of local and regional water supply planning programs is not a prerequisite in order to apply for a permit for a water supply project. Moreover, amendments to the VWPP regulation currently being considered by DEQ and the board do not include changes that would directly link water supply projects to local and regional water supply plans.

Uncertainty on the part of water suppliers and conservationists regarding the impact of directly linking water supply projects to local and regional water supply plans was a major factor in the planning and permitting processes not being linked.⁵ However, by not explicitly linking the planning and permitting process, some of the potential economic benefits accruing from this regulation could be foregone. A significant portion of the benefits of local and regional water supply planning accrue from the improvement in efficiency in the use of the state's water resource as a result of having

³ The 13 full-time positions include one water supply planning manager, one ground water data management position, one stream gauging position, eight water supply planning positions, and two ground water characterization positions.

⁴ The VWPP regulations deal with the permitting of intake structures and development of reservoirs to support the water supply planning activities of the state.

⁵ Water suppliers were concerned about linking the planning process to the permitting process due to the difference in horizon for these processes. While water supply planning is done over a 30-50 year horizon, water supply projects are undertaken on the basis of a much shorter horizon. Conservationists were concerned about linking the planning process to the permitting process due to the difference in the level of scrutiny and review of these two processes. The planning process is subject to less scrutiny and review than the permitting process for a water supply project.

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local and regional water supply plans. While DEQ believes that most localities will undertake water supply projects that are consistent with their local or regional water supply plans, not requiring a direct link between these two aspects of water supply management could result in not all the benefits of the proposed regulation being realized.

The net economic impact depends on whether the costs imposed by the proposed regulation are greater than or less than the benefits accruing from it. The additional costs include the cost to localities in developing, reviewing, and revising their water supply plans⁶ and the cost to DEQ in running the program. Estimates of these costs are provided above. The economic benefits accruing from this regulation include the provision of adequate drinking water supplies and an improvement in efficiency in the use of state water resources. However, estimates of these benefits are not available at this time. A benefits estimate would require calculating the reduction in risk to drinking water supplies through local and regional water supply planning and a valuation the risk reduction in terms of improved public health and safety. It would also require estimation of the impact of this regulation in preserving the state's water resources through improved efficiency in its use. While precise estimates of the benefits are not possible at this time, they are likely to be significant. Demand for water supply is likely to continue to increase over time, increasing the strain on existing water resources and making the provision of drinking water supplies increasingly challenging. Thus, the benefits of the proposed regulation are likely to be in the ballpark of the costs, if not larger than them.

Businesses and entities affected. The proposed regulation is likely to have a positive impact on businesses and entities providing water supply planning services. There will be an increase in demand for these services as localities seeking to develop, review, and revise their water supply plans. The precise number of such businesses operating in Virginia is not known.

Localities particularly affected. The proposed regulation applies to all localities in the Commonwealth. All cities, counties, and incorporated towns will be required to develop local and/or regional water supply plans and submit them to DEQ for approval. They will also be required to review the plans every five years and review, revise, and resubmit the plans every ten years. According to DEQ, there are 41 localities with population of less than or equal to 15,000, 48 localities with population between 15,000 and 35,000, and 45 localities with population greater than 35,000.

The cost of developing, reviewing, and revising local and regional water supply plans will be incurred by localities. However, DEQ intends to provide water supply planning grants to defray some of the cost to localities. The remaining costs are likely to be passed on to taxpayers in the form of higher rates and fees.

Projected impact on employment. DEQ intends to create 13 full-time positions to administer the program. In addition,

there is likely to be an increase in demand for water supply planning specialists from localities trying to meet the requirements of this regulation. This, in turn, could lead to more individuals employed in this area.

Effects on the use and value of private property. The proposed regulation is likely to result in an increase in demand for water supply planning services. Consequently, businesses and entities providing these services are likely to see an increase in demand for their services that, in turn, is likely to have a positive effect on their asset value.

Agency's Response to the Department of Planning and Budget's Economic Impact Analysis: The department has reviewed the economic impact analysis prepared by the Department of Planning and Budget and has no comment.

Summary:

The proposed regulation establishes a planning process and criteria that all local governments will use in the development of local or regional water plans. These plans will be reviewed by the Department of Environmental Quality and a determination will be made by the State Water Control Board on whether the plans comply with this regulation. Within five years of a compliance determination by the board, the plans will be reviewed to assess adequacy and significant changes will require the submission of an amended plan and review by the board. All local programs will be reviewed, revised and resubmitted to the Department of Environmental Quality every 10 years after the last approval.

CHAPTER 780.

LOCAL AND REGIONAL WATER SUPPLY PLANNING.

9 VAC 25-780-10. Application.

A. All counties, cities and towns (hereinafter "local governments") in the Commonwealth of Virginia shall submit a local water supply plan or shall participate in a regional planning unit in the submittal of a regional water supply plan to the board in accordance with this chapter.

B. The provisions of this regulation shall not affect any water supply project for which a permit application was submitted prior to January 1, 2003, to any state or federal agency. The provisions of this regulation shall not affect any water supply project for which an application for grant, loan or other funding has been made to a state or federal agency prior to January 1, 2003. All projects shall remain subject to applicable federal and state regulatory requirements.

C. Nothing in this chapter shall be construed as altering or authorizing any alteration of any existing surface, ground water or common law water rights of any property owner within the Commonwealth, except as required by federal or state law.

D. The review required by 9 VAC 25-780-140 shall not be a prerequisite for applying for a permit from the Commonwealth of Virginia for a water supply project.

⁶ As discussed above, some of the cost to localities is likely to be defrayed by water supply planning grants provided by the state.

9 VAC 25-780-20. Purpose of chapter.

The purpose of this chapter is to establish a comprehensive water supply planning process for the development of local, regional, and state water supply plans. This process shall be designed to (i) ensure that adequate and safe drinking water is available to all citizens of the Commonwealth; (ii) encourage, promote, and protect all other beneficial uses of the Commonwealth's water resources; and (iii) encourage, promote, and develop incentives for alternative water sources, including but not limited to desalinization.

This chapter establishes the required planning process and criteria that local governments shall use in the development of the local and regional plans.

9 VAC 25-780-30. Definitions.

Unless otherwise defined in this chapter or unless the context clearly indicates otherwise, the terms used in this regulation shall have the meanings ascribed to them by the State Water Control Law, Chapter 3.1 (§ 62.1-44.2 et seq.) of Title 62.1 of the Code of Virginia; the Ground Water Management Act of 1992, Chapter 2.5 (§ 62.1-254 et seq.) of Title 62.1 of the Code of Virginia; the Virginia Water Protection Permit Regulation, 9VAC 25-210 (2004); and the Surface Water Management Area Regulation, 9 VAC 25-220 (2004), including any general permits issued thereunder.

"Beneficial use" means both instream and offstream uses. Instream beneficial uses include, but are not limited to, the protection of fish and wildlife habitat, maintenance of waste assimilation, recreation, navigation, and cultural and aesthetic values. Offstream beneficial uses include, but are not limited to, domestic (including public water supply), agricultural, electric power generation, and commercial and industrial uses.

"Board" means the State Water Control Board.

"Community water system" means a waterworks that serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents, and is regulated by the Virginia Department of Health Waterworks Regulation (12 VAC 5-590).

"Conservation" means practices, techniques, and technologies that improve the efficiency of water use.

"Department" means the Department of Environmental Quality.

"Local government" means a city, incorporated town or county.

"Local program" means the combined water plan, resource conditions, and drought response and contingency plan developed in compliance with this regulation. The term "local program" will be used in this regulation to mean either local or regional programs. The term "program" implies the institution of a continuous planning process for maintenance of these documents.

"Planning area" means the geographical area as defined by local government boundaries that is included in a local or regional water supply plan.

"Planning period" means the 30- to 50-year time frame used by the locality to project future water demand in accordance with 9 VAC 25-780-100 B.

"Regional planning unit" means a collection of local governments who have voluntarily elected to develop and submit a regional water plan. A regional planning unit may be composed of all local governments located within the bounds of a planning district, any subset of local governments within the bounds of a planning district, or any group of local governments within multiple planning districts.

"Regional water plan" means a water plan developed and submitted by two or more cities or counties or both. Two or more towns may develop and submit a regional water plan where the plan results in the proposed development of future water supply projects that supply the water supply demands of the affected towns. Such plans developed by two or more towns may be included in regional water plans developed and submitted by counties or cities. Regional water plans shall be developed and submitted in conjunction with all public service authorities operating community water systems within the regional planning unit, if applicable.

"Safe yield of a complex intake (impoundments in conjunction with streams)" means the minimum withdrawal rate available to withstand the worst drought of record in Virginia since 1930. If actual gauge records are not available, correlation is to be made with a similar watershed and numbers synthesized in order to develop the report. Local governments may request this aid from the board.

"Safe yield of a simple intake (free-flowing stream)" means the minimum withdrawal rate available during a day and recurring every 30 years (30 year - one day low flow). To generate the report for this, data is to be used to illustrate the worst drought of record in Virginia since 1930. If actual gauge records are not available for this, gauges are to be correlated from similar watersheds and numbers are to be synthesized. Local governments may request this aid from the board.

"Self-supplied user" means any person making a withdrawal of surface water or ground water from an original source (e.g., a river, stream, lake, aquifer, or reservoir fed by any such water body) for their own use. Self-supplied users do not receive water from a community water system.

"Service area" means the geographical area served by a community water system.

"Technical evaluation committee" means a committee of state agencies, including but not limited to the Department of Health, the Department of Conservation and Recreation, the Marine Resources Commission, the Department of Historic Resources, and the Department of Game and Inland Fisheries, convened by the Department of Environmental Quality in accordance with subdivision 8 of 9 VAC 25-780-60 to provide comments on the impacts to or conflicts among instream and offstream uses resulting from proposed alternatives for meeting projected water demands.

"Unaccounted for losses" means the difference between a community water system's billing records for volumes of water distributed and production records for volumes of water treated.

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"Water demand management" means plans for water conservation, reuse, and reducing unaccounted for water losses contained in a local program.

"Water plan" means a document developed in compliance with this regulation. The term "water plan" will be used in this regulation to mean either local or regional water plans.

"Water sources" means wells, stream intakes, and reservoirs that serve as sources of water supplies.

9 VAC 25-780-40. Program development.

Local governments shall develop programs for local or regional water plans that are necessary to comply with this chapter. Local governments shall consult and coordinate with all community water systems in the planning area during the preparation of local or regional programs. Community water systems within the planning area shall cooperate and participate with the locality during preparation of the local program. Counties, cities, and towns are encouraged to develop regional programs. Local programs shall be designed to (i) ensure that adequate and safe drinking water is available, (ii) encourage and protect all beneficial uses, (iii) encourage and promote alternative water sources, and (iv) promote conservation.

9 VAC 25-780-50. Preparation and submission of a program.

A. Local governments must adopt a local program as defined in this section, including any revisions to comprehensive plans, water supply plans, water and sewer plans, and other local authorities necessary to implement this chapter. A local public hearing consistent with §15.2-1427 of the Code of Virginia is required during the development of the local program. The public hearing may be combined with other public hearings that may be required.

B. All local governments shall submit a local program to the department in accordance with the following schedule:

1. Local governments with populations in excess of 35,000 persons based on the most recent U.S. Census shall do so no later than [three years after the effective date of this regulation].
2. Local governments with populations in excess of 15,000 persons but no more than 35,000 persons based on the most recent U.S. Census shall do so no later than [four years after the effective date of this regulation].
3. Local governments with populations less than or equal to 15,000 persons based on the most recent U.S. Census shall do so no later than [five years after the effective date of this regulation].
4. Notwithstanding the above, local governments may elect to participate in the submittal of regional water supply plans. [Within three years of the effective date of this regulation], local governments participating in a regional plan shall provide notice to the department of the intent to participate in a regional plan and shall include the names of the other participating localities. Such regional plans shall be submitted no later than [six years after the effective date of this regulation].

Nothing in this section shall be construed as limiting the submittal of local or regional water supply plans before the date when such plans are due.

C. Local programs shall contain the elements listed below. This information may be derived from existing, readily available information and additional detailed studies shall not be required.

1. A description of existing water sources in accordance with the requirements of 9 VAC 25-780-70;
2. A description of existing water use in accordance with the requirements of 9 VAC 25-780-70;
3. A description of existing water resource conditions in accordance with the requirements of 9 VAC 25-780-90;
4. An assessment of projected water demand in accordance with the requirements of 9 VAC 25-780-100;
5. A description of water management actions in accordance with the requirements of 9 VAC 25-780-110 and 9 VAC 25-780-120;
6. A statement of need in accordance with the requirements of 9 VAC 25-780-130;
7. An alternatives analysis that identifies potential alternatives to address projected deficits in water supplies in accordance with the requirements of 9 VAC 25-780-130;
8. A map or maps identifying important elements of the program that may include existing environmental resources, existing water sources, significant existing water uses, and proposed new sources;
9. A copy of the adopted program documents including any local plans or ordinances or amendments that incorporate the local program elements required by this chapter;
10. A resolution approving the plan from each local government that is party to the plan; and
11. A record of the local public hearing, a copy of all written comments and the submitter's response to all written comments received.

D. All local programs shall be reviewed no later than five years after a compliance determination by the board in accordance with 9 VAC 25-780-140 F. Revised plans shall be submitted when this review indicates that circumstances have changed or new information has been made available that will result in water demands that will not be met by alternatives contained in the water plan. These circumstances may be caused by changes in demands, the availability of the anticipated source, cumulative impacts, in-stream beneficial uses, or other factors. In the case where the review by the local government or regional planning unit indicates that the circumstances have not changed sufficiently to warrant a revision of the water plan after five years, the locality shall notify the department that the existing plan is still in effect.

E. Notwithstanding subsection D of this section, all local programs shall be reviewed, revised and resubmitted to the department every 10 years after the date of last approval.

9 VAC 25-780-60. State role in program preparation.

To assist local governments in the development of local programs, the board will:

1. Provide technical and financial assistance;
2. Provide guidance on compliance options;
3. Facilitate acquisition of existing resource conditions (the department shall prepare and post on its website a list of readily available sources for the items identified in 9 VAC 25-780-90 B);
4. Facilitate acquisition of existing use information that has been reported to the department;
5. Facilitate acquisition of water management information (the department shall prepare and post on its website a list of acceptable practices that are used with regard to the topics in 9 VAC 25-780-110);
6. Identify acceptable methods for the projection of future water demands as per 9 VAC 25-780-100;
7. Provide any information regarding known conflicts relating to the development of alternatives;
8. At the request of the applicant, convene a technical evaluation committee meeting; and
9. Provide notice of local public hearings on the local program upon notification by the locality.

9 VAC 25-780-70. Existing water source information.

A. A water plan shall include current information on existing water sources.

B. A water plan shall include, for community water systems using ground water, the name and identification number of the well or wells, the well depth, the casing depth, the screen depth (top and bottom) or water zones, the well diameter, the design capacity for the average daily withdrawal and maximum daily withdrawal, the system capacity permitted by Department of Health, and the annual and monthly permitted amounts contained in ground water withdrawal permits for all wells located within ground water management areas.

C. A water plan shall include, for community water systems using surface water reservoirs, the name of the reservoirs, the sub-basins in which the reservoirs are located, the drainage area, the amount of on-stream storage available for water supply, the design capacity for average daily and maximum daily withdrawals from the reservoirs, the safe yield of the reservoirs, the capacity of any associated water treatment plant, the Department of Health permitted capacity of the systems, and any limitations on withdrawal established by permits issued by the board. For a community water system that operates a system of interconnected reservoirs, the reporting of the design capacity for withdrawals, designed average daily withdrawal, the designed maximum daily withdrawal and the safe yield may be for the entire system or may be reported as subsets of the system. The plan shall designate which reservoirs and which intakes constitute a system for the purposes of this paragraph. The plan must

report the drainage area and amount of storage available for water supply from each reservoir independently.

D. A water plan shall include, for community water systems using stream intakes, the name of the stream or river, the drainage area of the intake, the sub-basin in which the intake is located, the design capacity for average daily and designed maximum daily withdrawal from the stream, the safe yield, the design capacity of the pump station, the design capacity of the water treatment plant, the capacity of the system permitted by the Department of Health, and any limitation on withdrawals established by permits issued by the board.

E. To the extent that information is available, a water plan shall include a list of all self-supplied users of more than 300,000 gallons per month of surface water for nonagricultural uses, the name of the water body utilized, the design capacity for the average daily and maximum daily withdrawal, and any limitation on withdrawals established by permits issued by the board, the Department of Health or any other agency.

F. To the extent that information is available, a water plan shall include, for all self-supplied users of more than 300,000 gallons per month of ground water for nonagricultural uses, the name and identification number of the well or wells, the well depth, the casing depth, the screen depth (top and bottom) or water zones, the well diameter, the design capacity for the average daily and maximum daily withdrawal and any limitation on withdrawal established by permits issued by the board.

G. A water plan shall include the amount of ground or surface water to be purchased from water supply systems outside the geographic boundaries of the planning area on a maximum daily and average annual basis, any contractual limitations on the purchase of the water including but not limited to the term of any contract or agreement, the recipient(s) or areas served by the water purchased, and the name(s) of the supplier(s).

H. A plan shall include the amount of water available to be purchased outside the planning area from any source with the capacity to withdraw more than 300,000 gallons per month of surface and ground water, reported on a maximum daily and average annual basis and any contractual limitations on the purchase of the water including but not limited to the term of any contract or agreement, the geographic region(s) that receive the water purchased, and the name(s) of the supplier(s).

I. A water plan shall include, to the extent possible, a list of agricultural users who utilize more than 300,000 gallons per month, an estimate of total agricultural usage by source, whether the use is irrigation or nonirrigation, and whether the source is surface or ground water.

J. A water plan shall include an estimate of the number of residences and businesses that are self-supplied by individual wells withdrawing less than 300,000 gallons per month and an estimate of the population served by individual wells.

K. When available, a water plan shall include a summary of findings and recommendations from applicable source water assessment plans or wellhead protection programs.

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9 VAC 25-780-80. Existing water use information.

A. A water plan shall include, at a minimum, current information documenting existing water use as listed below. Water use information shall be obtained from Department of Health waterworks permit compliance reports, the department ground water permit compliance reports or department water use reports. Information shall be reported for the most recent previous annual compilation of such data that is available on the date of submission of the water plan.

B. A water plan shall include the following information for community water systems:

1. The population within the planning area served by each community water system.
2. The number of connections within the planning area for each community water system.
3. The average and maximum daily withdrawal for each community water system within the planning area.
4. The amount of water used within the planning area on an annual average basis, and on an average monthly basis for each community water system expressed in terms of million gallons per day.
5. The peak day water use by month for each community water system within the planning area.
6. An estimate of the water used on an average annual basis by self-supplied nonagricultural users of more than 300,000 gallons per month of surface and ground water within the service area of each community water system.
7. An estimate of the amount of water used on an average annual basis by self-supplied agricultural users of more than 300,000 gallons per month of surface and ground water within the service area of each community water supply.
8. An estimate of the number of self-supplied users of less than 300,000 gallons per month of ground water and an estimate of the total amount of water used by them on an annual average basis within the service area of each community water supply.
9. For each community water system included in the water plan, the plan shall include an estimate of the disaggregated amounts of water used in categories of use appropriate for the system. Typical categories may include:
 - a. Residential use;
 - b. Commercial institutional and light industrial (CIL) use;
 - c. Heavy industrial use;
 - d. Military water use;
 - e. Water used in water production processes;
 - f. Unaccounted for losses;
 - g. Sales to other community water systems and the names of such systems; or

h. Subtotals of the above categories for all community water systems

10. To the extent that information is available pursuant to 9 VAC 25-780-60 and other sources, for each community water system included in the water plan using stream intakes, the plan shall include a qualitative description of existing in-stream beneficial uses within the planning area or outside the planning area that may be affected by the point of stream withdrawal.

C. A water plan shall include an estimate of the water used on an average annual basis by self-supplied nonagricultural user of more than 300,000 gallons per month of surface and ground water outside the service areas of community water systems.

D. A water plan shall include an estimate of the amount of water used on an average annual basis by self-supplied agricultural users of more than 300,000 gallons per month of surface and ground water outside the service areas of community water systems.

E. A water plan shall include an estimate of the number of self-supplied users of less than 300,000 gallons per month of ground water and an estimate of the total amount of water used by them on an annual average basis outside the service areas of community water systems.

9 VAC 25-780-90. Existing resource information.

A. A program shall include a description of existing geologic, hydrologic, and meteorological conditions within the planning area, and in proximity to the point of withdrawal if it is outside the planning area.

B. A program shall include a description of existing environmental conditions that pertain to, or may affect, instream flow, instream uses, and sources that provide the current supply. This description of conditions may be provided in a distinct section of the plan document or as a part of the existing water sources information required pursuant to 9 VAC 25-780-70. This information may be derived from existing, readily available information and additional detailed studies shall not be required. The description of conditions shall include the following items, as they are applicable:

1. State or federal listed threatened or endangered species or habitats of concern;
2. Anadromous, trout and other significant fisheries;
3. River segments that have recreational significance including state scenic river status;
4. Sites of historic or archaeological significance;
5. Unusual geologic formations or special soil types;
6. Wetlands;
7. Riparian buffers and conservation easements;
8. Land use and land coverage including items such as percentage of impervious cover within a watershed and areas where new development may impact water quality of the source;

9. The presence of impaired streams and the type of impairment;

10. The location of point source discharges; and

11. Potential threats to the existing water quantity and quality, other than those from above.

9 VAC 25-780-100. Projected water demand information.

A. A water plan shall include projections of future water demand as listed below. Population in aggregate and disaggregate formulations should be estimated according to information from the U.S. Census Bureau, Bureau of Economic Analysis, the Virginia Employment Commission, or other accepted source of population information, including but not limited to, local or regional sources. Demand projection methodologies should be consistent with those outlined in the American Water Works Association or American Society of Civil Engineers manuals. Sources of information and methodologies used in projecting future water demand shall be documented.

B. A water plan shall estimate water demand within the planning area for 30 to 50 years into the future.

C. A water plan shall include an estimated future water use projected at the beginning of each decade (2010, 2020, 2030, etc.) within the planning period.

D. A water plan shall include the following projections for community water systems:

1. An estimate of population within the planning area served by each community water system;

2. A map depicting the proposed service area of each existing or proposed community water system;

3. Estimated water demand for each existing or proposed community water system on both an annual average and peak monthly basis;

4. Estimated water demand for each existing or proposed community water system disaggregated into categories of use appropriate for the system. Typical categories may include:

a. Residential use;

b. Commercial institutional and light industrial (CIL) use;

c. Heavy industrial use;

d. Military water use;

e. Water used in water production processes;

f. Unaccounted for losses;

g. Sales to other community water systems and the names of such systems; or

h. Subtotals of the above categories for all community water systems; and

5. Total projected water demand for all existing or proposed community water systems disaggregated into the categories used in subdivision 4 of this subsection.

E. A water plan shall include a projection of water demand within the planning area on an annual average basis for each existing and any proposed self-supplied nonagricultural user of more than 300,000 gallons per month of surface and ground water located outside the service areas of community water systems.

F. A water plan shall include a projection of the amount of water use on an annual average basis for each existing and any projected self-supplied agricultural user of more than 300,000 gallons per month of surface and ground water located outside the service areas of community water systems.

G. A water plan shall include a projection of the number of self-supplied users of less than 300,000 gallons per month of ground water and a projection of the amount of water used on an annual average basis outside the service areas of community water systems.

H. A water plan shall include, if available, any cumulative demand, use conflict, or in-stream flow information developed pursuant to 9 VAC 25-780-140 G.

I. A water plan shall explain how the projected needs of domestic consumption, in-stream uses, and economic development have been accounted for in the demand projection for the planning period.

9 VAC 25-780-110. Water demand management information.

A. As part of a long-term strategy, a water plan shall address conservation as a part of overall water demand management in accordance with the following requirements:

1. A water plan shall include information that describes practices for more efficient use of water that are used within the planning area. The type of measures to be described may include, but are not limited to, the adoption and enforcement of the Virginia Uniform Statewide Building Code sections that limit maximum flow of water closets, urinals and appliances; use of low-water use landscaping; and increases in irrigation efficiency.

2. A water plan shall include information describing the water conservation measures used within the planning area to conserve water through the reduction of use. The types of measures to be described may include, but are not limited to, technical, educational and financial programs.

3. A water plan shall include information that describes, within the planning area, the practices to address water loss in the maintenance of water systems to reduce unaccounted for water loss. The types of items to be described may include, but are not limited to: leak detection and repair and old distribution line replacement.

B. Current conservation practices, techniques, and technologies shall be considered in projecting water demand pursuant to 9 VAC 25-780-100 D.

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9 VAC 25-780-120. Drought response and contingency plans.

A program that includes community water systems and self-supplied users who withdraw more than an average of 300,000 gallons per month of surface water and ground water shall contain drought response and contingency plans in accordance with the following requirements:

1. Drought response and contingency plans shall be structured to address the unique characteristics of the water source that is being utilized and the nature of the beneficial use of water.
2. Drought response and contingency plans shall contain, at a minimum, the following three graduated stages of responses to the onset of drought conditions:
 - a. Drought watch stage responses are generally responses that are intended to increase awareness in the public and private sector to climatic conditions that are likely to precede the occurrence of a significant drought event. Public outreach activities shall be identified to inform the population served by a community water system of the potential for drought conditions to intensify and potential water conservation activities that may be utilized.
 - b. Drought warning stage responses are generally responses that are required when the onset of a significant drought event is imminent. Voluntary water conservation activities shall be identified with the goal of reducing water use by 5-10%.
 - c. Drought emergency stage responses are generally responses that are required during the height of a significant drought event. Mandatory water conservation activities shall be identified with the goal of reducing water use by 10-15%.
3. Drought response and contingency plans shall include references to local ordinances, if adopted, and procedures for the implementation and enforcement of drought response and contingency plans.

9 VAC 25-780-130. Statement of need and alternatives.

A. A water plan shall determine the adequacy of existing water sources to meet current and projected demand by preparing a clear statement of need that is derived from an evaluation of the information required by 9VAC 25-780-70 through 9VAC 25-780-110. The statement of need shall contain, at a minimum, a determination of whether the existing source(s) is adequate to meet current and projected demands.

B. If the determination is that the existing source is inadequate to meet projected demands during the planning period, the program shall include an alternative analysis of potential sources that includes the following information:

1. A description of potential water savings from water demand management actions including an estimated volume for each action;

2. A description of potential sources for new supplies including an estimated volume from each source; and

3. A description of potential resource issues or impacts, identified in accordance with 9 VAC 25-780-140 G, known for each potential new source that any future water project will need to consider in its development.

C. Potential alternatives considered shall include water demand management alternatives as well as more traditional means of increasing supply, i.e., wells, reservoirs, impoundments and stream intakes. Where appropriate, the program shall consider nontraditional means of increasing supplies such as interconnection, desalination, recycling and reuse. The analysis of potential alternatives may include a combination of short-term and long-term alternatives. The result of this analysis shall be provided as part of the submission required by 9 VAC 25-780-50 C 7.

9 VAC 25-780-140. Review of local programs.

A. The board shall review all programs to determine compliance with this regulation and consistency with the State Water Resources Plan. The board will review adopted elements of a local program according to review policies adopted by the board. Copies of the adopted local program documents and subsequent changes thereto shall be provided to the board.

B. To assist in the review of the program, the board shall provide the Department of Health and other agencies listed in 9 VAC 25-780-150 B along with any other agency the board deems appropriate, 90 days to evaluate the program. Comments must be received from the Department of Health or other agency by the deadline stipulated in the written notification from the board.

C. The board will assess the compliance of submitted programs with these regulations. The board shall prepare a tentative statement of findings on whether the program has demonstrated compliance with the following:

1. All elements of a local program identified in 9 VAC 25-780-50 have been submitted;
2. The program was developed through a planning process consistent with this chapter;
3. The results of any evaluation conducted pursuant to subsection G of this section have been appropriately accommodated;
4. The existing sources information complies with 9VAC 25-780-70;
5. The existing water use information complies with 9 VAC 25-780-80;
6. The existing resources information complies with 9 VAC 25-780-90;
7. The projected water demand is based on an accepted methodology and complies with 9 VAC 25-780-100;
8. The water demand management information complies with 9 VAC 25-780-110;

9. The drought response and contingency plan complies with 9 VAC 25-780-120;

10. The statement of need complies with 9 VAC 25-78-130 A;

11. When required, the alternatives comply with 9 VAC 25-780-130;

12. The local program is consistent with 9 VAC 25-390-20, § 62.1-11 of the Code of Virginia and Chapter 3.2 (§ 62.1-44.36 et seq.) of Title 62.1 of the Code of Virginia.

D. If the board's tentative decision is to find the local program in compliance with subsection C of this section, the board shall provide public notice of its findings pursuant to this section.

E. If the tentative decision of the board is to find the local program in noncompliance with subsection C of this section, the board shall identify (i) the reason for the finding of noncompliance, (ii) what is required for compliance, and (iii) the right to an informational proceeding under Article 3 (§ 2.2-4018 et seq.) of Chapter 40 of the Virginia Administrative Process Act.

F. The board shall make a final decision on whether the local program is in compliance with this chapter after completing review of the submitted program, any agency comments received, and any public comment received from a public meeting held pursuant to 9 VAC 25-780-160.

G. In conjunction with the compliance determination made by the board, the state will develop additional information and conduct additional evaluation of local or regional alternatives in order to facilitate continuous planning. This additional information shall be included in the State Water Resources Plan and used by localities in their program planning. This information shall include:

1. A cumulative demand analysis, based upon information contained in the State Water Resources Plan and other sources;

2. The evaluation of alternatives prepared pursuant to 9 VAC 25-780-130 B and C;

3. The evaluation of potential use conflicts among projected water demand and estimates of requirements for in-stream flow; and

4. An evaluation of the relationship between the local plan and the State Water Resources Plan.

H. The board may facilitate information sharing and discussion among localities when potential conflicts arise with regard to demands upon a source.

I. A local program's information shall be included in the State Water Resource Plan when determined to be in compliance by the board.

9 VAC 25-780-150. Public notice and public comment period.

A. The board shall give public notice on the department website for every tentative and final decision to determine local program compliance.

B. The board shall give public notice to the Department of Health, the Department of Conservation and Recreation, the Marine Resources Commission, the Department of Historic Resources, and the Department of Game and Inland Fisheries for every tentative and final decision on program compliance. The agencies shall have 90 days to submit written comment. At the request of the applicant, the board will convene a technical evaluation committee meeting to facilitate receipt of these comments.

C. The board shall provide a comment period of at least 30 days following the date of the public notice for interested persons to submit written comments on the tentative or final decision. All written comments submitted during the comment period shall be retained by the board and considered during its final decision.

D. Commenters may request a public meeting when submitting comments. In order for the board to grant a public meeting, there must be a substantial public interest and a factual basis upon which the commenter believes that the proposed program might be contrary to the purposes stated in 9 VAC 25-780-20.

E. The contents of the public notice of a proposed program compliance determination shall include:

1. Name(s) and address(es) of the locality(ies) that submitted the local or regional water plan;

2. Brief synopsis of the proposed plan including any identified future alternatives;

3. The name(s) of the principal water supply sources;

4. A statement of the tentative determination to certify or deny consistency with the regulation;

5. A brief description of the final determination procedure;

6. The address, e-mail address and phone number of a specific person at the state office from whom further information may be obtained; and

7. A brief description on how to submit comments and request a public meeting.

9 VAC 25-780-160. Public meetings.

A. Public notice of any public meeting held pursuant to 9 VAC 25-780-150 shall be circulated as follows:

1. Notice shall be published on the department website;

2. Notice shall be published once in a newspaper of general circulation in the county, city, or town where the local or regional water plan is in effect; and

3. Notice of the public meeting shall be sent to all persons and government agencies that requested a public meeting or have commented in response to the public notice.

B. Notice shall be effected pursuant to subdivisions A 1 through 3 of this section at least 30 days in advance of the public meeting.

C. The content of the public notice of any public meeting held pursuant to this section shall include at least the following:

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- 1. Name and address of the localities who prepared the program;*
- 2. The planning area covered by the program;*
- 3. A brief reference to the public notice issued for the comment period including the date of issuance unless the public notice includes the public meeting notice;*
- 4. Information regarding the time and location for the public meeting;*
- 5. The purpose of the public meeting;*
- 6. A concise statement of the relevant water resources planning, water quality, or fish and wildlife resource issues raised by the persons requesting the public meeting;*
- 7. Contact person and the address, e-mail address and phone number of the department office at which the interested persons may obtain further information or request a copy of the draft statement of findings prepared pursuant to 9 VAC 25 780-140 D; and*
- 8. A brief reference to the rules and procedures to be followed at the public meeting.*

9 VAC 25-780-170. Appeals.

All appeals taken from actions of the board or the director relative to the provisions of this chapter shall be governed by the Virginia Administrative Process Act (§ 2.2-4000 et seq. of the Code of Virginia).

9 VAC 25-780-180. Enforcement.

Enforcement of this chapter will be in accordance with §§ 62.1-44.15, 62.1-44.23, and 62.1-44.32 of the Code of Virginia.

9 VAC 25-780-190. Delegation of authority.

The executive director, or his designee, may perform any action of the board provided under this chapter, except as limited by § 62.1-44.14 of the Code of Virginia.

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